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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,386	12/11/2001	Sergey Alexandrovich Korenev	MED 2 1187-2	1710

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EXAMINER
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MAYEKAR, KISHOR

ART UNIT	PAPER NUMBER
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1753

DATE MAILED: 12/05/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

206

# Office Action Summary

Application No.

10/014,386

Applicant(s)

KORENEV ET AL.

Examiner

Kishor Mayekar

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21 is/are allowed.
- 6) ☒ Claim(s) 13-20 and 22-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/11/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 & 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 13-20 and 22-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 13, the phrase "oxygen and oxygen and oxygen containing gases" is confusing.

Regarding claim 15, the phrases "which accelerates" and "which fans" are referenced to a method of operating devices.

Regarding claim 18, the phrase "which conveys" is referenced to a method of operating devices.

Regarding claim 22, the phrase "which irradiates" is referenced to a method of operating devices.

Regarding claim 23, the phrases "which irradiates" and "which recirculates" are referenced to a method of operating devices.

Regarding claim 24, the phrases "which is depleted", "which intermittently sends" and "which applies" are referenced to a method of operating devices.

***Claim Rejections - 35 USC § 102 and § 103***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 13 and 14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by TABATA et al. (5,444,103), a reference cited by Applicant. See col. 2, lines 7-20 and lines 44-49.

7. Claims 16, 18, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over TABATA '103. The difference between TABATA and the instant claims are each of the limitations presented in the instant claims.

As to the subject matter of claim 16, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified TABATA's teachings because the selection of any of known equivalent radiation sources would be within the level of ordinary skill in the art.

As to the subject matter of claim 23, the provision of a gas recirculation loop would also be within the level of ordinary skill in the art.

As to the subject matters of claims 18 and 20, the provision of mechanical or automatic means to replace manual activity has been held to be obvious, *In re Venner* 120 USPQ 192.

8. Claims 13-16, 18-20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over TIGERA (6,486,481) in view of TABATA '103. TIGERA's invention is directed to an apparatus and method for treating polymeric material, such as PTFE, with radiation. TIGERA discloses that the apparatus comprises all the structures as claimed (see Fig. 1) except for the use of vacuum pump for drawing down oxygen and oxygen containing gases from the irradiation chamber. TABATA shows in an apparatus for treating PTFE by radiation the provision of vacuum in addition to inert gas (col. 2, lines 10-13). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified TIGERA's teachings as suggested by TABATA because the selection of any of known equivalent provision of oxygen-free atmosphere would be within the level of ordinary skill in the art.

*Allowable Subject Matter*

9. Claim 21 is allowed.
10. Claims 22 and 24 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.
11. Claim 17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
12. The following is a statement of reasons for the indication of allowable subject matter: because the prior art references do not disclose in an apparatus for irradiating fluoropolymer materials
  - the provision of at least one of magnets and electromagnetic coils disposed adjacent the irradiation chamber for reorienting the

fluoropolymer material in combination with other recited structures as claimed in claim 7;

- the provision of a means for applying at least one of electric and magnetic fields across the irradiation zone in combination with other recited structures as claimed in claim 21;
- the provision of a means for disposing adjacent the irradiation zone for applying at least one of electromagnetic and electrostatic fields in combination with other recited structures as claimed in claim 22; and
- the provision of an electric circuit for applying at least one of electromagnetic and electrostatic fields across the irradiation chamber in combination with other recited structures as claimed in claim 24.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (703) 308-0477. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (703) 308-3322. The fax



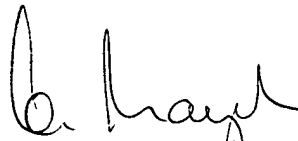
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phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Kishor Mayekar  
Primary Examiner  
Art Unit 1753

KM